

THAT WHICH IS CLAIMED:

1. A web transfer apparatus for a machine for making a fibrous web, comprising:

5 a first transfer device positioned in a press section of the machine for transferring a wet fibrous web, the web exiting the first transfer device being relatively wet;

a second transfer device positioned downstream of the first transfer device to receive the fibrous web directed from the first transfer device, the first transfer device and the second transfer device defining a space therebetween; and

10 a threading device positioned in the space between the first transfer device and the second transfer device, the threading device including an upper surface over which a tail of the fibrous web travels during a threading operation from the first transfer device to the second transfer device, the threading device including a plurality of tubes, each of the plurality of tubes defining at least one outlet for discharging air along at least a portion of the upper surface so as to provide an air cushion between the upper surface and the fibrous web such that the web tends to follow the upper surface in the direction of the second transfer device and is threaded thereinto.

20 2. An apparatus according to Claim 1, wherein the second transfer device comprises a press having a transfer nip formed between a guide roll and a suction transfer roll.

25 3. An apparatus according to Claim 1, wherein the second transfer device includes at least one roll that is positioned in the press section of the machine.

4. An apparatus according to Claim 1, wherein the second transfer device includes at least one roll that is positioned in a drying section of the machine.

30 5. An apparatus according to Claim 1, wherein the fibrous web exiting the first transfer device has a dryness of about 20-50%.

6. An apparatus according to Claim 1, wherein the fibrous web exiting the first transfer device has a dryness of less than about 60%.

5 7. An apparatus according to Claim 1, wherein the first transfer device includes a roll that supports the fibrous web, and further comprising a movable cutting device proximate the roll of the first transfer device that is operable to form the tail of the fibrous web.

10 8. An apparatus according to Claim 1, wherein the threading device is pivotally mounted proximate the first transfer device so that the threading device can be pivoted between an inoperative position and an operative position for directing the tail of the fibrous web from the first transfer device to the second transfer device.

15 9. An apparatus according to Claim 1, wherein the outlet defined by at least one of the plurality of tubes of the threading device comprises a plurality of openings for discharging air.

20 10. An apparatus according to Claim 1, wherein the plurality of tubes of the threading device each comprises a plurality of openings for discharging air, the openings of adjacent tubes being spaced apart relative to each other in a direction substantially transverse to a path of travel of the fibrous web defined by the threading operation of the fibrous web over the threading device.

25 11. An apparatus according to Claim 1, wherein the threading device is adjustable in position in a direction substantially transverse to a path of travel of the fibrous web.

30 12. An apparatus according to Claim 1, wherein the plurality of tubes extend in a direction substantially transverse to a path of travel of the fibrous web.

13. An apparatus according to Claim 1, wherein the plurality of tubes each have a substantially rectangular shape.

14. An apparatus for transferring a fibrous web along a path of travel between first and second transfer devices in a press section of a machine for making the fibrous web, the apparatus comprising:

a threading device for directing a tail of the fibrous web from the first transfer device to the second transfer device,

the threading device including a plurality of tubes that collectively define an upper surface over which the tail of the fibrous web travels during a threading operation, each of the plurality of tubes defining at least one outlet for discharging air along at least a portion of the stationary upper surface so as to provide an air cushion between the stationary upper surface and the fibrous web such that the web tends to follow the upper surface in the direction of the second transfer device and is threaded thereinto.

15. An apparatus according to Claim 14, wherein the fibrous web transferred between the first and second transfer devices has a relative dryness of about 20-50% as the web exits the first transfer device.

16. An apparatus according to Claim 14, wherein the fibrous web transferred between the first and second transfer devices has a relative dryness of less than about 60%.

17. An apparatus according to Claim 14, further comprising a movable cutting device proximate the first transfer device that is operable to cut the tail of the fibrous web.

18. An apparatus according to Claim 14, wherein the threading device is pivotally mounted proximate the first transfer device so that the threading device can be

pivoted between an inoperative position and an operative position for directing the tail of the fibrous web from the first transfer device to the second transfer device.

19. An apparatus according to Claim 14, wherein the second transfer device
5 includes a transfer nip between a guide roll and a suction transfer roll that is operable to receive the tail of the fibrous web directed from the threading device.

20. An apparatus according to Claim 14, wherein the plurality of tubes extend
10 in a direction substantially transverse to a path of travel of the fibrous web over the threading device.

21. An apparatus according to Claim 14, wherein the plurality of tubes each
have a substantially rectangular shape.

22. A method of transferring a tail of a fibrous web between first and second
15 transfer devices in a press section of a machine for making the fibrous web, the method comprising:

positioning a pivotable threading device between the first transfer device
and the second transfer device in an operative position;

20 directing the tail from the first transfer device to the pivotable threading device;

directing air through respective outlets of a plurality of tubes that
collectively define an upper surface of the pivotable threading device so as to provide an
air cushion between the upper surface and the fibrous web; and

25 directing the tail along the air cushion and upper surface of the pivotable
threading device in the direction of the second transfer device such that the tail is
threaded thereinto.

23. A method according to Claim 22, wherein directing the tail from the first
30 transfer device to the pivotable threading device includes cutting the tail with a cutting
device positioned adjacent the first transfer device.

24. A method according to Claim 22, wherein directing the tail from the first transfer device to the pivotable threading device includes directing the tail along a guide plate proximate the threading device.

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25. A method according to Claim 22, wherein positioning the pivotable threading device includes pivoting the threading device about a joint to define a predetermined angle between the upper surface of the threading device and a vertical plane, and maintaining the predetermined angle while the tail of the fibrous web is directed from the first transfer device to the second transfer device.

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